

**REMARKS/ARGUMENTS**

By the above, claims 53 and 61 have simply been rewritten in independent form including all of the limitation of the base claim and any intervening claims. Entry of such amendments is hereby requested.

5 This application has been reconsidered carefully in light of the Office Action dated as mailed on 31 July 2003. A careful reconsideration of the application by the Examiner in light of the foregoing amendments and the following remarks is respectfully requested.

10 This response is timely filed as it is filed within the three (3) month shortened statutory period for response to the outstanding Office Action. Further, as this response is hereby filed within two (2) months of the mailing date of the outstanding Office Action, it is understood that the shortened statutory period will expire on the date the advisory action is mailed should such advisory action not be mailed until after the end of the three-month shortened statutory period.

15 The Commissioner is hereby authorized to charge the fee for any additional claim fee due as a result of this Amendment to Deposit Account No. 19-3550.

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Claims 25-31 and 36-63 remain in the application, with claims 27-29, 43-46, 48-52, 55 and 56 having been withdrawn from consideration as being drawn to non-elected embodiments and claims 57-63 (elected invention only) allowed.

### **TELEPHONE DISCUSSION**

5                   As a preliminary matter, the undersigned wishes to thank Examiner Hardee for the courtesies extended during the above-identified telephonic discussion resulting in clarification of the indication of allowance of certain of the claims being limited to "elected invention only." Based on such discussion, it is understood that the limitation of the allowance of claims 57-63 to the "elected invention only" means  
10                   that such claims would be allowed if limited to the elected invention. If such understanding is incorrect in any way, the Examiner is requested to so advise.

### **Rejections - 35 U.S.C. §112**

The withdrawal of the 112 rejections is also gratefully acknowledged.

### **Allowable Subject Matter**

15                   The undersigned also wishes to thank Examiner Hardee for the allowance of claim 30, the identification that claim 53, if rewritten in independent form including all of the limitation of the base claim and any intervening claims, would be allowable and the identification that claim 57 and the claims dependent thereon are allowed to the extent that they read on the elected subject matter.

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By the above, claim 53 has been so rewritten. Thus, claim 53 is believed to be in condition for allowance and notification to that effect is solicited.

Also by the above, claim 61 (which claim requires that the water-reactive fuel precursor comprises potassium t-butyl carbonate) has also been rewritten in independent form including all of the limitation of the base claim and any intervening claims. Thus, claim 61 is also believed to be in condition for allowance and notification to that effect is solicited.

While the allowance of claim 57 and the claims dependent thereon "to the extent that they read on the elected subject matter" is acknowledged, it is noted that in response to the earlier restriction/election requirements, claims 57, 61 and 62 were identified as readable on the practice of the elected method employing compositions which include ammonium nitrate as a water-supplying compound and potassium t-butyl carbonate as a water-reactive fuel precursor. Moreover, claims 57, 61 and 62 had previously been rejected only under §112 and such §112 rejections have now been withdrawn.

In view thereof, as no prior art grounds of rejection of claims 57, 61 and 62 have now or previously been made in the present or any prior Action, claim 57 and the claims dependent thereon (including previously elected claims 61 and 62) are believed to be in condition for allowance and notification to that effect is solicited

Moreover, as no prior art grounds of rejection of claims 57, 61 and 62 have now or previously been made in the present or any prior Action and as claims 57 and 61 have not been amended, any Action making Final a rejection of such claims is clearly premature as Applicants have not been appropriately afforded an opportunity to amend the claims in response to any such newly presented rejection.

**Election/Restrictions**

The maintaining of the withdrawal of claims 27-29, 43-46, 48-52, 55 and 56 is acknowledged.

**Claim Rejections - 35 U.S.C. §102(b)**

Claims 25, 26, 31, 36-38, 40, 42, 47, and 54 were rejected under 35 U.S.C. §102(b) as being anticipated by WO 00/29261.

It is initially noted that WO 00/29261, on its face, identifies 25 May 2000 as the publication date. The subject application was filed on 17 April 2001.

Thus, WO 00/29261 would not constitute a printed publication more than one year prior to the date of the application for patent in the United States, as required for a rejection under 35 U.S.C. §102(b).

In view thereof, the withdrawal of such basis of rejection is requested.

It is further noted that claim 42 is dependent on claim 41. As claim 41, which requires that the first chamber be at least in part defined by a perforated

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housing, has not been rejected based on WO 00/29261, neither claim 42 which depends on claim 41 is believed to be properly rejected based on WO 00/29261 and notification to that effect is solicited.

Moreover, even if a rejection under 35 U.S.C. §102(a) had been intended, it is respectfully submitted that WO 00/29261 fails to show or suggest an improvement in a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the improvement comprising: heating a mixture containing at least a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ, as claimed in independent claim 25, for example. In particular, it is believed that WO 00/29261 fails to show or suggest heating a mixture containing at least a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ, as specifically claimed. In this regards, WO 00/29261 specifically teaches the inclusion of a carborane fuel material and a primary oxidant (water is identified as a preferred primary oxidant as page 12, lines 20-23). As disclosed in WO 00/29261, the carborane fuel and the primary oxidant (e.g., water) react to form first combustion products such as typically includes heat and a quantity of a first product fuel species. (See WO 00/29261, page 13, lines 17-24.) The inflator device in WO 00/29261 initially contains the primary oxidant

(e.g. water) and this primary oxidant is **NOT** provided or supplied by a water-supplying compound, as in the claimed invention.

Independent claim 47 is directed to a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the method comprising: reacting a water-supplying compound contained within the inflator device to form water, contacting a water-reactive fuel precursor contained within the inflator device with at least a portion of the formed water to form the fuel material in situ within the inflator device, contacting the formed fuel material with a quantity of compressed gas, the compressed gas including a quantity of oxidant, reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat, heating a stored quantity of inert gas with at least a portion of the produced heat to form an increased volume of gas and passing at least a portion of the increased volume of gas into the inflatable safety device to effect the inflation thereof.

Such specific method for inflating an inflatable safety device is not believed to be shown or suggested by WO 00/29261. As submitted above and as made clear by Tables 1 and 2 of WO 00/29261, the primary oxidant (water) is included in the original material load contained within the inflator device thereof, i.e., the primary oxidant is loaded into the inflator device and not formed therein.

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Moreover, as previously submitted and which prior argument has not been specifically addressed in the outstanding Office Action, the prior Action incorrectly refers to Tables 1 and 2 in WO 00/29261 as supporting the contention that ammonium nitrate is the source of the water oxidant. For example, page 23, line 22 through page 27, line 2 of WO 00/29261 makes clear that the oxidant source material is the source for a secondary oxidant such as reacts, e.g., burns, with a fuel produced upon reaction of the carborane fuel and the primary oxidant. This is in sharp contrast to the claimed invention which requires that the formed fuel material react with oxidant present in the stored compressed gas within the inflator. For example, claims 26 and 47 each includes the steps of:

contacting the formed fuel material with a quantity of compressed gas, the compressed gas including a quantity of oxidant, reacting at least a portion of the formed fuel material with at least a portion of the quantity of oxidant to produce heat.

In view of the above, the withdrawal of this stated basis of rejection is respectfully requested.

#### **Claim Rejections - 35 U.S.C. §103**

1. Claims 25, 26, 31, 36-38, 40, 42, 47 and 54 were rejected under 35 U.S.C. §103(a) as being unpatentable over WO 00/29261.

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As submitted above relative to the anticipation rejection of claims 25, 26, 31, 36-38, 40, 42, 47, and 54 based on WO 00/29261, and which arguments are herein and hereat incorporated, such methods for inflating an inflatable safety device as specifically claimed are not believed to be shown or suggested by WO 00/29261.

5                   In view thereof, these claims are believed to be patentable over WO 00/29261 and notification to that effect is solicited.

2.           Claims 25, 26, 31, 36-39, 41 and 42 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,224,099 B1 to Nielson et al. (hereinafter  
10                   “Nielson”).

Independent claim 25 is directed to an improvement in a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products, the improvement comprising: heating  
15                   a mixture containing at least a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ. Thus, claim 25 specifically requires that in a method for inflating an inflatable safety device via an inflator device wherein a fuel material reacts to form gas generation reaction products,



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that a mixture containing at least a water-supplying compound and a water-reactive fuel precursor be heated within the inflator device to form the fuel material in situ.

Such in situ formation of such a fuel material is nowhere shown or suggested by Nielson. For example, Nielson does not show or suggest the heating of a mixture containing at least a water-supplying compound and a water-reactive fuel precursor within the inflator device to form the fuel material in situ, as specifically claimed.

In view of the above, such basis of rejection of claim 25 and the claims dependent thereon are believed to be overcome or not applicable and notification to that effect is solicited.

It is further specifically noted that claim 42 specifies a liner within the perforated housing maintaining the first chamber contents in discharge proximity with the initiator. The end piece 4 of Nielson is just that, an end piece. Such an end piece is not a liner and is clearly not a liner within a perforated housing effective to maintain chamber contents in discharge proximity with the initiator, as required by claim 42.

Thus, such basis of rejection of claim 42 is clearly believed to be overcome or not applicable and notification to that effect is solicited.

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### Conclusion

It is believed that the above Amendment places all pending claims in condition for allowance and notification to that effect is solicited. However, should the Examiner detect any remaining issue or have any question, the Examiner is kindly requested to contact the undersigned, preferably by telephone, in an effort to expedite examination of the application.

Respectfully submitted,



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